IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

EMC CORPORATION, EMC)
INTERNATIONAL COMPANY and EMC)
INFORMATION SYSTEMS)
INTERNATIONAL,)
)
Plaintiffs,)
)
V.) C.A. No. 13-1985 (RGA)
)
PURE STORAGE, INC.,)
)
Defendant.)

PLAINTIFFS' RULE 50(A) MOTION FOR JUDGMENT AS A MATTER OF LAW

Morris, Nichols, Arsht & Tunnell LLP Jack B. Blumenfeld (#1014)
Jeremy A. Tigan (#5239)
1201 North Market Street
P.O. Box 1347
Wilmington, DE 19899
(302) 658-9200
jblumenfeld@mnat.com
jtigan@mnat.com
Attorneys for Plaintiffs EMC Corporation,
EMC International Company, and EMC
Information Systems International

OF COUNSEL:

Josh A. Krevitt Paul E. Torchia GIBSON, DUNN & CRUTCHER LLP 200 Park Avenue New York, NY 10166-0193 (212) 351-2490

Stuart M. Rosenberg GIBSON, DUNN & CRUTCHER LLP 1881 Page Mill Road Palo Alto, CA 94304-1211 (650) 849-5389 Chris R. Ottenweller Matthew H. Poppe Jesse Y. Cheng Orrick, Herrington & Sutcliffe LLP 1000 Marsh Road Menlo Park, CA 94025 (650) 614-7400

Alyssa M. Caridis Orrick, Herrington & Sutcliffe LLP 777 South Figueroa Street Los Angeles, CA 90017 (213) 629-2020

T. Vann Pearce, Jr.
ORRICK, HERRINGTON & SUTCLIFFE LLP
Columbia Center
1152 15th Street, N.W.
Washington, D.C. 20005
(202) 339-8400

Paul T. Dacier Krishnendu Gupta William R. Clark Thomas A. Brown EMC CORPORATION 176 South Street Hopkinton, MA 01748

March 15, 2016

TABLE OF CONTENTS

			<u>Page</u>	
I.	INTRODUCTION			
II.	LEG	AL STA	NDARDS1	
III.	EMC'S MOTION FOR JUDGMENT AS A MATTER OF LAW OF INFRINGEMENT OF THE '464 PATENT			
	A.		easonable Jury Could Find that Pure Does Not Literally Infringe Claim 32 of 64 Patent	
			TION FOR JUDGMENT AS A MATTER OF LAW OF NO INVALIDITY PATENT	
	A.	No Re	easonable Jury Could Find that the Sun Patent is Prior Art	
	B.		easonable Jury Could Find that Pure's References Anticipate All Claims of eserted Patents	
			TION FOR JUDGMENT AS A MATTER OF LAW OF INFRINGEMENT VALIDITY OF THE '556 PATENT	
	A.		easonable Jury Could Find that Pure Does Not Infringe Claims 6 and 7 of 56 Patent	
		1.	EMC Provided Substantial Evidence that Pure Infringes the '556 Patent, Including the "Base Memory Address" Limitation	
		2.	Pure Did Not Present Sufficient Rebuttal Evidence for a Jury to Conclude that it Does Not Meet the "Base Memory Address" Element	
	B.		easonable Jury Could Find that Claims 6 and 7 of the '556 Patent Are d as Obvious	
		1.	Pure Failed to Identify the "Base Memory Address" Element in Either Young or Santeler	
		2.	Pure Failed to Present Any Evidence that a Person of Ordinary Skill in the Art Would Be Motivated to Modify Young or Santeler to Achieve the Claimed Invention	
		3.	Pure Failed to Address or Present Any Evidence Regarding Objective Indicia of Nonobviousness	
		4.	Pure Failed to Present Sufficient Evidence that Either Santeler or Young Discloses the "Memory Regions" Limitation	

TABLE OF CONTENTS (continued)

VI.	EMC'S MOTION FOR JUDGMENT OF A MATTER OF LAW THAT EMC IS ENTITLED TO LOST PROFITS AND A REASONABLE ROYALTY			
	A.	EMC Is Entitled to Lost Profits As a Matter of Law	13	
	B.	EMC Is Entitled to Reasonable Royalty Damages	14	
VII.	CON	CLUSION	14	

TABLE OF AUTHORITIES

Page(s) Cases ActiveVideo Networks, Inc. v. Verizon Commc'ns, Inc., Finisar Corp. v. DirecTV Grp., Inc., Grain Processing Corp. v. Am. Maize-Products Co., 185 F.3d 1341 (Fed. Cir. 1999)......13 InTouch Techs., Inc. v. VGO Commc'ns, Inc., Mahurkar v. C.R. Bard, Inc., 79 F.3d 1572 (Fed. Cir. 1996)......4 Net MoneyIN, Inc. v. Verisign, Inc., Panduit Corp. v. Stahlin Bros. Fibre Works, Inc., Pannu v. Iolab Corp., 155 F.3d 1344 (Fed. Cir. 1998)...... Perkin-Elmer Corp. v. Computervision Corp., Rego v. ARC Water Treatment Co. of Pa, Silicon Graphics, Inc. v. ATI Techs., Inc., 607 F.3d 784 (Fed. Cir. 2010)......9 State Indus. v. Mor-Flo Indus. Inc., **Statutes** 35 U.S.C. §102(e)4

I. INTRODUCTION

Plaintiffs EMC Corporation, EMC International Company, and EMC Information Systems International (collectively, "EMC") respectfully move for judgment as a matter of law pursuant to Fed. R. Civ. P. 50(a) with respect to infringement, validity, and damages, as discussed more fully below.

II. LEGAL STANDARDS

"Rule 50(a) provides that a court may grant judgment as a matter of law in a jury trial at the close of the evidence if it determines that there is no legally sufficient evidentiary basis for a reasonable jury to find for a party on an issue." *Rego v. ARC Water Treatment Co. of Pa*, 181 F.3d 396, 400 (3d Cir. 1999); *see also Pannu v. Iolab Corp.*, 155 F.3d 1344, 1348 (Fed. Cir. 1998); *Perkin-Elmer Corp. v. Computervision Corp.*, 732 F.2d 888, 893 (Fed. Cir. 1984).

III. EMC'S MOTION FOR JUDGMENT AS A MATTER OF LAW OF INFRINGEMENT OF THE '464 PATENT

EMC submits that the Court should enter judgment as a matter of law that Pure Storage infringes claim 32 of U.S. Patent No. 7,373,464 ("the '464 patent"). On direct examination, EMC's expert, Mr. Jestice, applied the Court's claim construction element by element and presented substantial evidence to demonstrate that Pure's accused products literally infringe the '464 patent. *E.g.*, Trial Tr. at 506:20-513:12, 528:10-529:9. EMC also presented evidence that Pure Storage makes, sells, and offers for sale the accused products in the United States. *E.g.*, *id.* at 530:6-19. Pure Storage concedes that the only element in dispute is "returning the identifier" and that Pure's accused devices meet all other limitations of Claim 32 of the '464 patent. *E.g.*, *id.* at 1581:14-23. The Court construed "returning" to mean "delivering back" and "identifier" to mean "information that identifies a data segment." D.I. 121 at 1. Because Pure's expert, Dr.

Zadok, failed to provide evidence sufficient to support a finding of noninfringement, the Court should enter judgment for EMC as a matter of law.

A. No Reasonable Jury Could Find that Pure Does Not Literally Infringe Claim 32 of the '464 Patent

Mr. Jestice provided substantial evidence that Pure's accused products practice the "returning the identifier" element by first comparing the "identifier" to the contents of the SD Table, and subsequently "delivering back" the "identifier" when a duplicate is found by adding the "identifier" to the SD Table. *E.g.*, Trial Tr. at 515:22-516:15, 520:13-521:5. The system, having first taken the "identifier" to the SD Table for comparison, is therefore logically delivering it back to the SD Table when it is subsequently stored there. Mr. Jestice properly applied the Court's construction of the claims. *E.g.*, *id.* at 512:19-24.

Pure's expert, Dr. Zadok, agrees that once the identifier is created, "first there's a lookup in the SD Table," *E.g.*, *id.* at 1582:13-16, and that subsequently, if there is a match in the Recent Table, the SD Table is updated with said identifier. *E.g.*, *id.* at 1582:24-1583:15. Not disputing the process, Dr. Zadok instead disputes that this process constitutes "returning the identifier." Dr. Zadok disagrees with the idea of a logical return, asserting that the table would have to request the identifier or that he would need to see a return statement of an identifier that is delivered back. *E.g.*, *id.* at 1588:5-11. However, Dr. Zadok's opinion rests entirely on an impermissible claim construction. In its Memorandum Opinion regarding claim construction, the Court specifically rejected that "returning" require software implementations, maintaining the plain and ordinary meaning of the term.

In the briefing, Defendant sensibly agreed not to limit the term to software implementations as it may encompass non-software ones, such as a "delivering module." (D.I. 92 at 29). The Court agrees. The explicit limitations proposed by Defendant, however, "to the calling routine or delivering module" may nonetheless incorrectly limit the construction. Therefore, the plain and ordinary meaning, deliver back, must control.

- D.I. 115 at 8. On cross examination, Dr. Zadok confirmed that his opinion *requires* that Pure's source code contain a return statement.
 - Q. And does that mean in your view that there must be a return statement in source code in order to infringe the last element of Claim 32 of the '464 Patent?
 - A. I have to see code that returns an identifier as the claim asks.
 - Q. Do you think this claim, sir, requires a return statement in source code in order to infringe? Yes or no?
 - A. I think that it has to have not just any return statement, but a return statement for the identifier.
 - Q. So I think the answer is yes, plus. Your point is yes, the claim absolutely requires that there be a return statement in source code, and even that's not enough, it has to be a particular kind of return statement doing a particular thing. Is that fair?
 - A. Yes. I need to see that there's a returning of an identifier.

Trial Tr. at 1585:18-1586:7. Because Dr. Zadok applied a claim construction explicitly rejected by the Court, a jury cannot reasonably rely on his opinion refuting literal infringement. *See Finisar Corp. v. DirecTV Grp., Inc.*, 523 F.3d 1323, 1333 (Fed. Cir. 2008).

IV. EMC'S MOTION FOR JUDGMENT AS A MATTER OF LAW OF NO INVALIDITY OF THE '015 PATENT

EMC respectfully moves for judgment as a matter of law that the asserted claims of U.S. Patent No. 7,434,015 ("the '015 patent") are not invalid. Pure Storage's invalidity defense with respect to the '015 patent is limited to anticipation. Pure Storage contends that three separate references anticipate the asserted claims of the '015 patent: the Sun patent, the Venti paper, and the Moulton patent.¹ As discussed below, no reasonable jury could conclude that Pure has met

The Sun reference is U.S. Patent No. 6,889,297 to Oliver Krapp (DTX557). The Venti reference is Sean Quinlian and Sean Doward, "Venti: a new approach to archival storage," *Proceedings of the FAST 2002 Conference on File and Storage Technologies* (DTX560). The Moulton reference is U.S. Patent No. 6,704,730 to Gregory Moulton et al. (DTX556).

its burden of showing, by clear and convincing evidence, that any of these references anticipate the asserted claims of the '015 patent.

A. No Reasonable Jury Could Find that the Sun Patent is Prior Art

Pure has the burden of proving, by clear and convincing evidence, that the Sun patent is prior art. *See Mahurkar v. C.R. Bard, Inc.*, 79 F.3d 1572, 1578 (Fed. Cir. 1996). The Sun patent, which was filed on March 22, 2002, can only be prior art if it was filed before the date of invention of the '015 patent. *See* 35 U.S.C. §102(e). The date of invention is the date of conception so long as, after conception, the inventor diligently reduced the invention to practice. *Mahurkar*, 79 F.3d at 1577. Because the undisputed evidence shows that the Sun patent was filed *after* the date of invention of the '015 patent, judgment of a matter of law is appropriate.

Dr. Kai Li, an inventor on the '015 patent, testified that he was "absolutely certain" that he conceived of the inventions of the '015 patent prior to March 16, 2002, which is before the March 22, 2002 filing date of the Sun patent. *E.g.*, Trial Tr. at 428:18-24, 475:21-476:12. The documentary evidence, for example, also shows conception prior to March 22, 2002. In particular, Dr. Li's whiteboard photos (PTX9, PTX10, PTX11) all bear dates prior to the Sun patent's filing date, and his Architecture Specification (PTX8) has an original date of March 16, 2002. Dr. Li's testimony also makes clear that he worked extremely hard to reduce his invention to practice, working over 14 hours per day. *E.g.*, Trial Tr. at 399:10-18. EMC's expert, Mr. Jestice, demonstrated that the whiteboard photos and Architecture Specification support conception of all asserted claims by March 16, 2002. *E.g.*, Trial Tr. at 1954:14-1967:13.

In contrast, Pure's expert, Dr. Zadok, was silent on conception and offered no rebuttal to the substantial evidence regarding conception and diligent reduction to practice. Indeed, Pure's counsel attempted to preclude EMC's counsel from asking Dr. Zadok any questions regarding conception on the grounds that Dr. Zadok did not address that topic during direct examination.

See, e.g., Trial Tr. at 1609:7-23. As a result, no reasonable jury could conclude that the Sun patent was filed before the invention date of the '015 patent, and thus the Sun patent is not prior art.

B. No Reasonable Jury Could Find that Pure's References Anticipate All Claims of the Asserted Patents

No reasonable jury could conclude that Pure has shown, by clear and convincing evidence, that the Sun, Venti, and Moulton references disclose all limitations of the asserted claims of the '015 patent. In order to anticipate, a prior art reference "must not only disclose all elements of the claim within the four corners of the document, but must also disclose those elements arranged as in the claim." *Net MoneyIN, Inc. v. Verisign, Inc.*, 545 F.3d 1359, 1370 (Fed. Cir. 2008) (internal citations omitted).

All of the asserted claims require a "space efficient, probabilistic summary." *See*, e.g., '015 patent at claims 1, 2, 7, 15, and 16. None of the Sun, Venti, nor Moulton references disclose this limitation. For example, Dr. Zadok admits that the Venti and Moulton references disclose hash identifiers that are treated as unique, causing the data segment associated with a particular identifier to be discarded in the event that the identifier matches a previously stored identifier. *See*, *e.g.*, Trial Tr. at 1597:22-1599:3, 1605:4-1607:6. These disclosures are fundamentally inconsistent with the Court's construction of "probabilistic summary" and thus no reasonable jury could find that they anticipate. Indeed, with respect to Venti, Dr. Zadok provided no opinion explaining why any specific data structure disclosed in the Venti reference provides an "indicat[ion] *with possible uncertainty* whether a data segment has already been stored, as required by the Court's construction of "probabilistic summary." *See* Trial Tr. at 1419:2-1422:9.

In addition, the Sun reference is devoid of any disclosure regarding the size of the data structure in which the identifiers are stored, and the Moulton reference teaches that the database storing the hash identifiers also includes all of the corresponding data segments. *See*, *e.g.*, Trial Tr. at 1594:3-12. These disclosures, or lack thereof, cannot be reconciled with the Court's construction of "space-efficient," making judgment as a matter of law appropriate. ²

Furthermore, the Sun, Venti, and Moulton references also fail to anticipate claim 7 of the '015 patent. With respect to the Sun reference, there is no disclosure of a confirmation step using higher latency memory that follows an initial determination step that occurs in lower latency memory. Instead, Pure improperly attempts to combine aspects of different embodiments to create a new embodiment that does not exist within the four corners of the reference. *E.g.*, Trial Tr. at 1389:6-1397:4; *see also Net MoneyIN*, 545 F.3d at 1370. The Venti reference also fails to anticipate claim 7 in light of its failure to disclose an initial determination using a "probabilistic summary," as discussed above. Finally, Pure expressly *concedes* that Moulton does not invalidate claim 7. *See*, *e.g.*, Trial Tr. at 1591:18-24.

V. EMC'S MOTION FOR JUDGMENT AS A MATTER OF LAW OF INFRINGEMENT AND NO INVALIDITY OF THE '556 PATENT

With respect to infringement of the '556 patent, Pure disputes only one element: "base memory address." But Pure's arguments that its FlashArray does not meet this element, presented through the testimony of its technical expert, run contrary to the language of claim 6 and add an extratextual requirement to the Court's claim construction. No reasonable jury could

The Court has construed "space efficient" to mean "taking up less memory space than the stored data segments." D.I. 426 at 2. The Court has construed "probabilistic summary" to mean "a data structure that indicates, with possible uncertainty, whether a data segment is already stored." *Id.* at 1.

rely on Pure's improper view of this claim element to find that Pure does not infringe the '556 patent.

Nor could a reasonable jury find, based on the conclusory testimony presented at trial, that the asserted claims are obvious. Pure failed to identify the "base memory address" element in either of the references on which Pure relies (Young and Santeler). Pure contends, however, that a person of ordinary skill in the art would fill this gap in the prior art by relying on his or her general knowledge of "base memory addressing." But Pure fails entirely to present evidence that a person of ordinary skill in the art would be motivated to modify Young or Santeler in the manner suggested to achieve the claimed invention. Pure also fails to address any objective indicia of nonobviousness, which the Federal Circuit requires in the obviousness analysis.

A. No Reasonable Jury Could Find that Pure Does Not Infringe Claims 6 and 7 of the '556 Patent

Pure does not dispute that its FlashArray meets every element of the asserted claims of the '556 patent except the "base memory address" element. *E.g.*, Trial Tr. at 1703:9-20. But Pure did not present sufficient evidence for a reasonable jury to conclude that the FlashArray does not employ this element. Judgment as a matter of law in favor of EMC that Pure infringes claims 6 and 7 of the '556 patent is therefore appropriate.

1. EMC Provided Substantial Evidence that Pure Infringes the '556 Patent, Including the "Base Memory Address" Limitation

EMC presented substantial evidence that Pure infringes claims 6 and 7 of the '556 patent, including an element-by-element analysis of how Pure's FlashArray meets the claims. *See*, *e.g.*, Trial Tr. at 660:1-668:2, 713:4-721:24. EMC's technical expert, Dr. Jones, paid particular attention to the disputed "base memory address" element. *See*, *e.g.*, *id.* at 664:8-665:6, 679:1-686:2, 715:17-717:12. For example, Dr. Jones explained that FlashArray addresses memory segments (pages) by assigning "page numbers." *E.g.*, *id.* at 680:4-10. FlashArray accesses data

within the memory segments using the page number and offset, as required by the Court's construction. *See*, *e.g.*, *id.* at 680:11-683:12. EMC also presented evidence that Pure engaged in acts of direct infringement by making, selling, and testing FlashArray. *See*, *e.g.*, *id.* at 718:21-719:15.

2. Pure Did Not Present Sufficient Rebuttal Evidence for a Jury to Conclude that it Does Not Meet the "Base Memory Address" Element

Pure's technical expert, Dr. Plank, conceded that all claim elements other than the "base memory address" were present in the FlashArray product. *E.g.*, Trial Tr. at 1703:9-20. But Pure's rebuttal evidence that FlashArray does not meet the "base memory address" element, presented through Dr. Plank, is insufficient for a reasonable jury to conclude that Pure does not infringe the asserted claims.

Dr. Plank agrees that the page number assigned to each memory segment is an address. *See*, *e.g.*, Trial Tr. at 1707:10-14. He contends, however, that the page number "is not an address on the storage location to be accessed" because it is not a *physical* address. *See*, *e.g.*, Trial Tr. 1706:2-4. But this misapplies the Court's claim construction. Neither the claims nor the Court's claim construction requires the base memory address to be physical. *See*, *e.g.*, Trial Tr. 1706:8-19. A jury cannot reasonably find non-infringement based on a theory premised on an incorrect claim construction. *See Finisar Corp. v. DirecTV Grp.*, *Inc.*, 523 F.3d 1323, 1333 (Fed. Cir. 2008).

Dr. Plank's only other argument is that the FlashArray software does not know where specific blocks are stored on an SSD. *See*, *e.g.*, Trial Tr. at 1724:16-24. But this again misinterprets the claim language. The claims do not preclude the system as a whole from using "several layers of translation," *see*, *e.g.*, Trial Tr. 1662:7-10, to determine the location of data on an SSD. To the contrary, that feature is one of the advantages of base memory addresses. *E.g.*,

Trial Tr. 630:2-22. Indeed, Pure did not argue or present any evidence that, using the page number and offset, FlashArray cannot locate and access all storage locations on an SSD. Therefore, applying the Court's construction, no reasonable jury could conclude that FlashArray does not meet the "base memory address" element.

B. No Reasonable Jury Could Find that Claims 6 and 7 of the '556 Patent Are Invalid as Obvious

With respect to the '556 patent, Pure presented only two invalidity theories at trial: obviousness over U.S. Patent No. 5,680,579 ("Young") and obviousness over U.S. Patent No. 6,223,301 ("Santeler"). Pure must establish invalidity by clear and convincing evidence. *ActiveVideo Networks, Inc. v. Verizon Commc'ns, Inc.*, 694 F.3d 1312, 1327 (Fed. Cir. 2012). Pure's evidence for both of its invalidity theories falls far short of this standard. No reasonable jury could find claims 6 and 7 invalid due to obviousness.

1. Pure Failed to Identify the "Base Memory Address" Element in Either Young or Santeler

Dr. Plank agreed at trial that he was not contending that either Young or Santeler discloses all of the elements in the asserted claims of the '556 patent. See, e.g., Trial Tr. at 1711:12-19. In particular, Dr. Plank did not present sufficient evidence to find that Young or Santeler discloses the "base memory" address element. With respect to this element in Young, Dr. Plank identified "an intelligent controller and a memory control microprocessor," and explained that "one of the ways to implement a memory controller would be to use a page table to use paging which assigned base addresses." E.g., id. at 1677:10-1678:9. Similarly, in Santeler, Dr. Plank only identified a generic "memory controller" when discussing its alleged disclosure of "base memory address." See, e.g., id. at 1686:3-11. But the disclosure of a processor potentially capable of implementing base memory addressing, without more, is insufficient to establish that the element is present in these prior art references. See Silicon

Graphics, Inc. v. ATI Techs., Inc., 607 F.3d 784, 797 (Fed. Cir. 2010). Based on this evidence alone, no reasonable jury could find that either Young or Santeler discloses the "base memory address" element of the '556 patent.

2. Pure Failed to Present Any Evidence that a Person of Ordinary Skill in the Art Would Be Motivated to Modify Young or Santeler to Achieve the Claimed Invention

In light of the lack of explicit disclosure of the "base memory address" limitation in Young or Santeler, Dr. Plank's invalidity theories rely on the knowledge of a person of ordinary skill in the art to fill this gap. But Dr. Plank does not present any evidence, let alone clear and convincing evidence, "that a skilled artisan would have been motivated to combine the teachings of the prior art references to achieve the claimed invention." *ActiveVideo*, 694 F.3d at 1327.

Dr. Plank testified that there are "many ways of doing addressing in a storage system," only one of which is base memory addressing. *E.g.*, Trial Tr. 1648:11-15. Completely absent from his testimony is an explanation of why a person of ordinary skill in the art would be motivated to apply base memory addressing in Young or Santeler as opposed to any of the "many" other forms of addressing. *See*, *e.g.*, *id.* at 1677:10-1681:5, 1686:3-11. That base memory addressing was known, by itself, is insufficient to establish that a person of ordinary skill in the art would have been motivated to apply it to the prior art. *See ActiveVideo*, 694 F.3d at 1327-28. Indeed, Dr. Jones' testimony that base memory addressing is particularly unsuited for Young and Santeler, *e.g.*, Trial Tr. 2058:5-2060:7, 2067:2-2070:2, is not contradicted in the record.

Furthermore, Pure failed to explain "how [Young or Santeler] would operate or read on the asserted claims" if base memory addressing were applied. *Id.* at 1327. The asserted claims require more than a generic application of base memory addresses; the memory system must assign a different base memory address to each memory segment in a memory region. Dr. Plank

did not provide any evidence that the memory controllers in Young and Santeler would assign base memory addresses specifically to memory segments, as opposed to memory regions, or that they would assign different base memory addresses to each memory segment in a memory region. *Seei, e.g.*, Trial Tr. 1677:10-1681:5, 1686:3-11; *ActiveVideo*, 694 F.3d at 1328 (finding claims nonobvious because defendant "fail[ed] to explain why a person of ordinary skill in the art would have combined elements from specific references *in the way the claimed invention does*").

Dr. Plank's conclusory testimony is insufficient for a reasonable jury to find that the asserted claims of the '556 patent are obvious over either Young or Santeler.

3. Pure Failed to Address or Present Any Evidence Regarding Objective Indicia of Nonobviousness

Pure's failure to present any evidence on objective indicia of nonobviousness is fatal to its contention that claims 6 and 7 of the '556 patent are obvious. *See InTouch Techs., Inc. v. VGO Commc'ns, Inc.*, 751 F.3d 1327, 1352 (Fed. Cir. 2014) ("By failing to account for objective evidence of nonobviousness, Dr. Yanco's analysis was incomplete, and ultimately insufficient to establish obviousness by clear and convincing evidence."). The Federal Circuit has explained that where "an expert purports to testify . . . to the ultimate question of obviousness, the expert *must* consider all factors relevant to that ultimate question," including objective indicia of nonobviousness. *Id.* at 1352 n.8 (emphasis added).

Contrary to clear precedent, in providing his opinion on the ultimate question of obviousness, Dr. Plank did not address *any* objective indicia of nonobviousness. EMC, through both its and Pure's witnesses, provided evidence on the commercial success of EMC's XtremIO (which practices the '556 patent) and Pure's FlashArray, as well as Pure's decision to continue using RAID-3D and its failure to even attempt a design-around in the face of allegations of

infringement. *See*, *e.g.*, Trial Tr. 659:3-24, 1175:13-1176:9, 2074:22-2078:24. The evidence also demonstrated that the commercial success of these products was due, in part, to the RAID technology in the '556 patent. In light of the substantial—and unrebutted—evidence of objective indicia of nonobviousness in the record, no reasonable jury could find that the asserted claims of the '556 patent are obvious. *See InTouch*, 751 F.3d at 1352 (reversing judgment invalidating claims as obvious because expert "did not even factor the objective evidence of nonobviousness into her obviousness analysis").

4. Pure Failed to Present Sufficient Evidence that Either Santeler or Young Discloses the "Memory Regions" Limitation

Pure failed to present sufficient evidence that Santeler discloses "memory regions." Dr. Plank's only analysis of this element is the statement that "Santeler discloses stripe regions which is the region of a board devoted to a single stripe." *E.g.*, Trial Tr. 1685:2-6. In Santeler, a stripe region includes only one block (alleged memory segment) per memory module (alleged memory board). DTX513 at 3:30, 3:56-59 & Fig. 3A; Trial Tr. 1684:13-1685:10. The stripe region thus does not satisfy claim 6, which requires multiple memory regions per memory board and multiple memory segments per memory region. Dr. Plank's conclusory analysis does not address the Court's claim construction or provide sufficient evidence on which a jury could conclude that this limitation is met.

Dr. Plank's analysis of the alleged "memory regions" in Young is similarly insufficient. Dr. Plank relies on a portion of Young stating that "a portion of each memory element [PCMCIA card] is configured as spare memory space." E.g. Trial Tr. 1674:10-18; DTX512 at 3:65-67. Dr. Plank explained that the PCMCIA cards are the memory boards, but he presented no evidence—only a bare assertion—that the "spare memory space" on the each board contains multiple memory segments, as required by the claims. See, e.g., Trial Tr. 1672:13-20, 1674:10-18. There

is thus insufficient evidence for a jury to find this limitation present. For this additional reason, no reasonable jury could find that either Santeler or Young renders obvious the asserted claims of the '556 patent.

VI. EMC'S MOTION FOR JUDGMENT OF A MATTER OF LAW THAT EMC IS ENTITLED TO LOST PROFITS AND A REASONABLE ROYALTY

EMC respectfully moves for judgment as a matter of law pursuant to Fed. R. Civ. P. 50(a) that EMC is entitled to lost profits and reasonable royalty damages in the event at least one asserted claim is found infringed and not invalid.

A. EMC Is Entitled to Lost Profits As a Matter of Law

EMC has met it burden of proving lost profits as a result of Pure's infringement. Specifically, EMC has shown (1) that there was a demand for the patented product (i.e., Pure's FlashArray and the patented inline deduplication and RAID features), (2) that there were no acceptable non-infringing alternatives to the patented inventions that were available to Pure for use in its products, (3) that EMC had the manufacturing, financial, and marketing capacity to make any infringing sales made by Pure that otherwise would have been made by EMC, and (4) the amount of profit that EMC would have made if Pure had not infringed. *E.g.*, Trial Tr. 934-82; *See State Indus. v. Mor-Flo Indus. Inc.*, 883 F.2d 1573 (Fed. Cir. 1989); *Panduit Corp. v. Stahlin Bros. Fibre Works, Inc.*, 575 F.2d 1152, 1156 (6th Cir. 1978).

Given EMC's showing, the burden shifted to Pure to show that EMC's claim is unreasonable for some or all of the last sales. Moreover, Pure bore a heavy burden to show that its hypothetical non-infringing alternatives, which were never on the market, would actually have been available during the damages period. *Grain Processing Corp. v. Am. Maize-Products Co.*, 185 F.3d 1341 (Fed. Cir. 1999). Because Pure has failed to meet its burden, judgment as a matter of law in EMC's favor is appropriate.

B. EMC Is Entitled to Reasonable Royalty Damages

The Patent Act provides that "[u]pon a finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed by the court." 35 U.S.C. §284. Therefore, EMC is entitled to damages of at least a reasonable royalty in the event at least one asserted claim is found infringed and not invalid

VII. CONCLUSION

For the above reasons, EMC respectfully requests that the Court grant EMC's motions for judgment as a matter of law.

OF COUNSEL:

Josh A. Krevitt
Paul E. Torchia
GIBSON, DUNN & CRUTCHER LLP
200 Park Avenue
New York, NY 10166-0193
(212) 351-2490

Stuart M. Rosenberg GIBSON, DUNN & CRUTCHER LLP 1881 Page Mill Road Palo Alto, CA 94304-1211 (650) 849-5389

Chris R. Ottenweller Matthew H. Poppe Jesse Y. Cheng Orrick, Herrington & Sutcliffe LLP 1000 Marsh Road Menlo Park, CA 94025 (650) 614-7400

Alyssa M. Caridis Orrick, Herrington & Sutcliffe LLP 777 South Figueroa Street Los Angeles, CA 90017 (213) 629-2020 MORRIS, NICHOLS, ARSHT & TUNNELL LLP

/s/Jack B. Blumenfeld

Jack B. Blumenfeld (#1014) Jeremy A. Tigan (#5239) 1201 North Market Street P.O. Box 1347 Wilmington, DE 19899 (302) 658-9200 jblumenfeld@mnat.com jtigan@mnat.com

Attorneys for Plaintiffs EMC Corporation, EMC International Company and EMC Information Systems International T. Vann Pearce, Jr.
ORRICK, HERRINGTON & SUTCLIFFE LLP
Columbia Center
1152 15th Street, N.W.
Washington, D.C. 20005
(202) 339-8400

Paul T. Dacier Krishnendu Gupta William R. Clark Thomas A. Brown EMC CORPORATION 176 South Street Hopkinton, MA 01748

March 15, 2016

CERTIFICATE OF SERVICE

I hereby certify that on March 15, 2016, I caused the foregoing to be electronically filed with the Clerk of the Court using CM/ECF, which will send notification of such filing to all registered participants.

I further certify that I caused copies of the foregoing document to be served on March 14, 2016, upon the following in the manner indicated:

John W. Shaw, Esquire David M. Fry, Esquire SHAW KELLER 300 Delaware Avenue, Suite 1120 Wilmington, DE 19801 Attorneys for Defendant

Robert A. Van Nest, Esquire
Matthew Werdegar, Esquire
Ashok Ramani, Esquire
R. Adam Lauridsen, Esquire
Corey A. Johanningmeier, Esquire
David W. Rizk, Esquire
Stuart L. Gasner, Esquire
KEKER & VAN NEST LLP
633 Battery Street
San Francisco, CA 94111-1809
Attorneys for Defendant

VIA ELECTRONIC MAIL

VIA ELECTRONIC MAIL

/s/ Jack B. Blumenfeld
Jack B. Blumenfeld (#1014)